In the Claims

1-45. (Cancelled)

46. (New) An isolated antibacterial protein isolated from *Streptococcus salivarius* strain K12 on deposit at Deutsche Sammlung von Mikroorganismen Und Zellkulturen GmbH, Braunschweig, Germany, accession number DSM 13084 which has a molecular mass of approximately 2733 Da, as determined by ion-spray mass spectrometry, and the N-terminal amino acid sequence of SEQ ID NO: 1.

47. (New) An isolated antibacterial protein which has an amino acid sequence which differs from the sequence of SEQ ID NO: 3 by the insertion, deletion or substitution of from one to three amino acids.

48. (New) The protein as claimed in claim 46, wherein the protein is bacteriocidal.

49. (New) The protein as claimed in claim 47, wherein the protein is bacteriocidal.

50. (New) The protein as claimed in claim 48, which is bacteriocidal with respect to *Streptococcus pyogenes*.

51. (New) The protein as claimed in claim 49, which is bacteriocidal with respect to *Streptococcus pyogenes*.

52. (New) An antibacterial composition comprising the protein as claimed in claim 46.

53. (New) An antibacterial composition comprising the protein as claimed in claim 47.

54. (New) A therapeutic formulation which comprises the protein as claimed in claim 46 in combination with a diluent, carrier and/or excipient.

55. (New) A therapeutic formulation which comprises the protein as claimed in claim 47 in combination with a diluent, carrier and/or excipient.

56. (New) The therapeutic formulation as claimed in claim 54, which is an orally administrable medicament.

57. (New) The therapeutic formulation as claimed in claim 55, which is an orally administrable medicament.

58. (New) The therapeutic formulation as claimed in claim 56, wherein the medicament is a syrup, mouthwash, gargle, toothpaste or mouth spray.

59. (New) The therapeutic formulation as claimed in claim 57, wherein the medicament is a syrup, mouthwash, gargle, toothpaste or mouth spray.

60. (New) The therapeutic formulation as claimed in claim 56, wherein the medicament in a unit dosage form.

61. (New) The therapeutic formulation as claimed in claim 57, wherein the medicament in a unit dosage form.

62. (New) The therapeutic formulation as claimed in claim 56, wherein the medicament is a lozenge or capsule.

63. (New) The therapeutic formulation as claimed in claim 57, wherein the medicament is a lozenge or capsule.

64. (New) The therapeutic formulation as claimed in claim 56, in which said protein is included in a food or drink.

65. (New) The therapeutic formulation as claimed in claim 57, in which said protein is included in a food or drink.

66. (New) The therapeutic formulation as claimed in claim 64, in which said food or drink is a dairy product based food or drink.

67. (New) The therapeutic formulation as claimed in claim 65, in which said food or drink is a dairy product based food or drink.

68. (New) The therapeutic formulation as claimed in claim 66, in which said protein is included in milk powder, milk biscuits, milk, yoghurt or cheese.

69. (New) The therapeutic formulation as claimed in claim 67, in which said protein is included in milk powder, milk biscuits, milk, yoghurt or cheese.

70. (New) The therapeutic formulation as claimed in claim 66, in which said protein is included in a flavoured milk.

71. (New) The therapeutic formulation as claimed in claim 67, in which said protein is included in a flavoured milk.

72. (New) The therapeutic formulation as claimed in claim 56, in which said protein is included in a confectionery.

73. (New) The therapeutic formulation as claimed in claim 57, in which said protein is included in a confectionery.

74. (New) The therapeutic formulation as claimed in claim 72, in which said confectionery is a chewing gum.

75. (New) The therapeutic formulation as claimed in claim 73, in which said confectionery is a chewing gum.

76. (New) The therapeutic formulation as claimed in claim 54, which further comprises one or more secondary antibacterial agents.

77. (New) The therapeutic formulation as claimed in claim 55, which further comprises one or more secondary antibacterial agents.

78. (New) The therapeutic formulation as claimed in claim 76, in which said secondary antibacterial agent(s) are selected from bacteriocin-like inhibitory substance(s) (BLIS).

79. (New) The therapeutic formulation as claimed in claim 77, in which said secondary antibacterial agent(s) are selected from bacteriocin-like inhibitory substance(s) (BLIS).

80. (New) The therapeutic formulation as claimed in claim 76, wherein the one or more secondary antibacterial agents are selected from the group consisting of Salivaricin A, a microorganism which expresses Salivaricin A, an antibacterial protein having the amino acid sequence of SEQ ID NO:5, and a microorganism which expresses the antibacterial protein having the amino acid sequence of SEQ ID NO:5.

81. (New) The therapeutic formulation as claimed in claim 77, wherein the one or more secondary antibacterial agents are selected from the group consisting of Salivaricin A, a microorganism which expresses Salivaricin A, an antibacterial protein having the amino acid sequence of SEQ ID NO:5, and a microorganism which expresses the antibacterial protein having the amino acid sequence of SEQ ID NO:5.

82. (New) A polynucleotide which encodes the protein as claimed in claim 46.

83. (New) A polynucleotide which encodes the protein as claimed in claim 47.

84. (New) A polynucleotide which comprises the coding sequence of SEQ ID NO: 2.

85. (New) A polynucleotide which encodes the antibacterial protein as claimed in claim 46, wherein the polynucleotide is part of the genome of *Streptococcus salivarius* strain K12, on deposit at Deutsche Sammlung von Mikroorganismen Und Zellkulturen GmbH, Braunschweig, Germany, accession number DSM 13084.

86. (New) A microorganism, in substantially pure form, which includes a polynucleotide which:

a) encodes a protein as claimed in claim 46;

b) comprises the coding sequence of SEQ ID NO:2, and

c) expresses the antibacterial protein as claimed in claim 46.

87. (New) A microorganism, in substantially pure form, which includes a polynucleotide which:

a) encodes a protein as claimed in claim 47;

b) comprises the coding sequence of SEQ ID NO:2, and

c) expresses the antibacterial protein as claimed in claim 47.

88. (New) The microorganism as claimed in claim 86, in which said polynucleotide is heterologous to the microorganism.

89. (New) The microorganism as claimed in claim 87, in which said polynucleotide is heterologous to the microorganism.

90. (New) The microorganism as claimed in claim 86, which is a *Streptococcus salivarius* organism.

91. (New) The microorganism as claimed in claim 87, which is a *Streptococcus salivarius* organism.

92. (New) A therapeutic formulation comprising the microorganism as claimed in claim 86.

93. (New) A therapeutic formulation comprising the microorganism as claimed in claim 87.

94. (New) A method of treating an individual to at least inhibit growth of harmful streptococcal bacteria in the upper respiratory tract, comprising the step of administering an effective amount of the protein as claimed in claim 46.

95. (New) A method of treating an individual to at least inhibit growth of harmful streptococcal bacteria in the upper respiratory tract, comprising the step of administering an effective amount of the protein as claimed in claim 47.

96. (New) A method of treating an individual to at least inhibit growth of harmful streptococcal bacteria in the upper respiratory tract, comprising the step of administering an effective amount of the therapeutic formulation as claimed in claim 54.

97. (New) A method of treating an individual to at least inhibit growth of harmful streptococcal bacteria in the upper respiratory tract, comprising the step of administering an effective amount of the therapeutic formulation as claimed in claim 55.

98. (New) A method of treating an individual to at least inhibit growth of harmful streptococcal bacteria in the upper respiratory tract, comprising the step of administering an effective amount of the microorganism as claimed in claim 86.

99. (New) A method of treating an individual to at least inhibit growth of harmful streptococcal bacteria in the upper respiratory tract, comprising the step of administering an effective amount of the microorganism as claimed in claim 87.

100. (New) A method of treating an individual to at least inhibit growth of harmful streptococcal bacteria in the upper respiratory tract, comprising the step of administering an effective amount of the therapeutic formulation as claimed in claim 92 orally to said individual.

101. (New) A method of treating an individual to at least inhibit growth of harmful streptococcal bacteria in the upper respiratory tract, comprising the step of administering an effective amount of the therapeutic formulation as claimed in claim 93 orally to said individual.

102. (New) The method as claimed in claim 94, wherein said microorganism is administered as part of a medicament, a food or drink or a confectionery.

103. (New) The method as claimed in claim 95, wherein said microorganism is administered as part of a medicament, a food or drink or a confectionery.

104. (New) The method as claimed in claim 96, wherein said microorganism is administered as part of a medicament, a food or drink or a confectionery.

105. (New) The method as claimed in claim 97, wherein said microorganism is administered as part of a medicament, a food or drink or a confectionery.

106. (New) The method as claimed in claim 98, wherein said microorganism is administered as part of a medicament, a food or drink or a confectionery.

107. (New) The method as claimed in claim 99, wherein said microorganism is administered as part of a medicament, a food or drink or a confectionery.

108. (New) The method as claimed in claim 100, wherein said microorganism is administered as part of a medicament, a food or drink or a confectionery.

109. (New) The method as claimed in claim 101, wherein said microorganism is administered as part of a medicament, a food or drink or a confectionery.

110. (New) The method as claimed in claim 94, wherein said microorganism is a *Streptococcus salivarius* strain selected from strains K12 and K30.

111. (New) The method as claimed in claim 95, wherein said microorganism is a *Streptococcus salivarius* strain selected from strains K12 and K30.

112. (New) The method as claimed in claim 96, wherein said microorganism is a *Streptococcus salivarius* strain selected from strains K12 and K30.

113. (New) The method as claimed in claim 97, wherein said microorganism is a *Streptococcus salivarius* strain selected from strains K12 and K30.

114. (New) The method as claimed in claim 98, wherein said microorganism is a *Streptococcus salivarius* strain selected from strains K12 and K30.

115. (New) The method as claimed in claim 99, wherein said microorganism is a *Streptococcus salivarius* strain selected from strains K12 and K30.

116. (New) The method as claimed in claim 100, wherein said microorganism is a *Streptococcus salivarius* strain selected from strains K12 and K30.

117. (New) The method as claimed in claim 101, wherein said microorganism is a *Streptococcus salivarius* strain selected from strains K12 and K30.

118. (New) The method as claimed in claim 94, which includes a preliminary step of pre-treating said individual to at least reduce the bacterial population present in the upper respiratory tract.

119. (New) The method as claimed in claim 95, which includes a preliminary step of pre-treating said individual to at least reduce the bacterial population present in the upper respiratory tract.

120. (New) The method as claimed in claim 96, which includes a preliminary step of pre-treating said individual to at least reduce the bacterial population present in the upper respiratory tract.

121. (New) The method as claimed in claim 97, which includes a preliminary step of pre-treating said individual to at least reduce the bacterial population present in the upper respiratory tract.

122. (New) The method as claimed in claim 98, which includes a preliminary step of pre-treating said individual to at least reduce the bacterial population present in the upper respiratory tract.

123. (New) The method as claimed in claim 99, which includes a preliminary step of pre-treating said individual to at least reduce the bacterial population present in the upper respiratory tract.

124. (New) The method as claimed in claim 100, which includes a preliminary step of pre-treating said individual to at least reduce the bacterial population present in the upper respiratory tract.

125. (New) The method as claimed in claim 101, which includes a preliminary step of pre-treating said individual to at least reduce the bacterial population present in the upper respiratory tract.

126. (New) The method as claimed in claim 118 wherein said pre-treatment comprises the step of administering an antibiotic orally to said individual.

127. (New) The method as claimed in claim 119 wherein said pre-treatment comprises the step of administering an antibiotic orally to said individual.

128. (New) The method as claimed in claim 120 wherein said pre-treatment comprises the step of administering an antibiotic orally to said individual.

129. (New) The method as claimed in claim 121 wherein said pre-treatment comprises the step of administering an antibiotic orally to said individual.

130. (New) The method as claimed in claim 122 wherein said pre-treatment comprises the step of administering an antibiotic orally to said individual.

131. (New) The method as claimed in claim 123 wherein said pre-treatment comprises the step of administering an antibiotic orally to said individual.

132. (New) The method as claimed in claim 124 wherein said pre-treatment comprises the step of administering an antibiotic orally to said individual.

133. (New) The method as claimed in claim 125 wherein said pre-treatment comprises the step of administering an antibiotic orally to said individual.

134. (New) A method of treatment of a patient against infections of the upper respiratory tract caused by streptococcal organisms which comprises the steps of:

(i) orally administering to said patient an amount of an antibiotic effective to reduce the numbers of streptocci present; and

(ii) administering, to the resulting bacterially depopulated environment, *Streptococcus salivarius* organism(s), in substantially pure form, which produce BLIS to repopulate said environment.

135. (New) An antibacterial protein which has the amino acid sequence of SEQ ID NO: 5.

136. (New) A polynucleotide comprising the coding sequence of SEQ ID NO: 4.

137. (New) A therapeutic formulation which comprises the antibacterial protein as claimed in claim 135, in combination with a diluent, carrier and/or excipient.

138. (New) A therapeutic formulation which contains the antibacterial protein as claimed in claim 46 and the antibacterial protein having the amino acid sequence of SEQ ID NO: 5.

139. (New) A therapeutic formulation which contains the antibacterial protein as claimed in claim 47 and the antibacterial protein having the amino acid sequence of SEQ ID NO: 5.

140. (New) A therapeutic formulation which contains at least one *S. salivarius* organism, in substantially pure form, which expresses the antibacterial protein as claimed in claim 46 and at least one other *S. salivarius* organism, in substantially pure form, which expresses an antibacterial protein having the amino acid sequence of SEQ ID NO: 5.

141. (New) A therapeutic formulation which contains at least one *S. salivarius* organism, in substantially pure form, which expresses the antibacterial protein as claimed in claim 47 and at least one other *S. salivarius* organism, in substantially pure form, which expresses an antibacterial protein having the amino acid sequence of SEQ ID NO: 5.

142. (New) The therapeutic formulation as claimed in claim 92, which is a lozenge or a capsule.

143. (New) The therapeutic formulation as claimed in claim 93, which is a lozenge or a capsule.